

REMARKS**Status of the Claims**

Claims 1 to 46 (all of the previously pending claims) are canceled herein and claims 47 to 57 are added. Accordingly, upon entry of this amendment, claims 47 to 57 will be pending.

Claim Amendments Made Herein

The language of each pending claim is derived from the previously pending claims, though the length of the claims, particularly independent claims 47, 52 and 55, has been shortened with respect to their predecessors. No new matter is added in these claims.

The Outstanding Office Action

The Examiner rejects claims 1 to 46 under the judicially created doctrine of double patenting over claims 1 to 46 of U.S. Patent No. 6,609,140. In particular, the Examiner argues that in "claims 1-46, the limitations cited in the present application are exactly [the] same as the limitations cited in [] U.S. Patent No. 6,609,140."

Response to the Office Action

Applicants have amended the claims by canceling each of claims 1 to 46 and providing new claims 47 to 57 which do not recite exactly the same limitations recited in claims 1 to 46 of U.S. Patent No. 6,609,140, thereby obviating the rejection.

In addition, Applicant submits that claims 47 to 57 are patentable over the prior art of record as no references disclose, teach or suggest a final stage of butterfly calculations in which the calculations store their output in a shuffled order resulting in a correct ordering of transform outputs.

Conclusion

As a result of the foregoing amendments, all of the claims pending upon entry of this amendment (claims 47 to 57) appear to be in condition for allowance. If the

Examiner believes that further communication would expedite allowance of these claims, Applicant requests that the Examiner contact the undersigned attorney at the Examiner's convenience.

Dated: August 18, 2004

Respectfully submitted,

By 

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